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Subject:

Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Supplemental Remedial Investigations/Feasibility Studies Monthly Progress Report
Area 1 – Morrow Dam to Plainwell Dam
Area 2 – Plainwell Dam to Otsego City Dam (Otsego City Impoundment)
July 2010

SEDIMENTS

Dear Jim:

Date:
August 13, 2010

Attached is the 41st monthly progress report for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Supplemental Remedial Investigation/Feasibility Study (SRI/FS). This progress report is submitted as per Paragraph 37 of the February 2007 Administrative Settlement Agreement and Order on Consent (AOC) for Remedial Investigations/Feasibility Studies (Docket No. V-W-07-C-864), as well as Section 7.1 of the associated Statement of Work (SOW). If you have any questions, please do not hesitate to contact me.

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Sincerely,

ARCADIS U.S., Inc.

Michael J. Erickson, P.E.
Vice President

Our ref:
B0064539.0001.00014
#2

DEP/plf
Attachment

Copies:

Michael Berkoff, USEPA
Sam Chummar, USEPA
Sam Borries, USEPA
Paul Bucholtz, MDNRE (with Attachment A)
Jeff Keiser, CH2M HILL (with Attachment A)
Todd Goeks, NOAA (with Attachment A)
Richard Gay, Weyerhaeuser Company
Martin Lebo, Ph.D., Weyerhaeuser Company
Kathy Huibregtse, RMT Inc. (with Attachment A)
J. Michael Davis, Esq., Georgia-Pacific LLC
Garry Griffith, P.E., Georgia-Pacific LLC
Paul Montney, P.E., Georgia-Pacific LLC

**MONTHLY PROGRESS REPORT FOR THE ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE SRI/FS
AREA 1 (MORROW DAM TO PLAINWELL DAM)
AREA 2 (PLAINWELL DAM TO OTSEGO CITY DAM – OTSEGO CITY IMPOUNDMENT)**

REPORT #41, JULY 2010

**PREPARED BY ARCADIS U.S., INC.
AUGUST 13, 2010**

ON BEHALF OF GEORGIA-PACIFIC LLC

SUBMITTED TO

**JAMES SARIC, REMEDIAL PROJECT MANAGER
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**Monthly Progress Report for the Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site SRI/FS – Area 1 and 2**

REPORT #41, JULY 2010

**Significant Developments and Activities during the Period, Including Actions Undertaken
Pursuant to the AOC and SOW**

- On July 2, ARCADIS U.S., Inc. (ARCADIS) submitted the draft Area 2/Otsego City Impoundment SRI/FS Work Plan to the United States Environmental Protection Agency (USEPA).
- On July 6, USEPA requested that Appendix A of the final *Area 1 Work Plan Supplement: Baseline Ecological Risk Assessment Work Plan* (Area 1 BERA Work Plan) be removed and that mention of the exposure point concentration (EPC) development work group be included.
- On July 6, ARCADIS forwarded to CH2M HILL, USEPA, United States Fish and Wildlife Service (USFWS), and CDM the University of Ottawa proposal titled *Predicting the Sensitivity of Any Avian Species to Embryotoxic Effects of Any PCB Congener*.
- On July 15, the Michigan Department of Natural Resources and Environment (MDNRE) notified USEPA that continued monitoring of groundwater in the former Plainwell Impoundment Time Critical Removal Area (TCRA) Area was not required. This sampling is discussed in Section 3.4.6 of the Area 1 SRI/FS Work Plan.
- On July 20, ARCADIS submitted to USEPA the USEPA-approved revised final Area 1 BERA Work Plan.
- On July 22, ARCADIS participated in a teleconference meeting of the Toxicity Reference Values (TRV) work group. Prior to the call, ARCADIS forwarded to CH2M HILL, USEPA, USFWS, and CDM support materials for egg-based TRV development, the agenda, and a status summary of all TRVs to be developed by the group.
- Georgia-Pacific LLC awaits USEPA approval of the Area 2/Otsego City Impoundment SRI/FS Work Plan.
- Georgia-Pacific LLC awaits USEPA approval to discontinue monitoring of groundwater in the former Plainwell Impoundment TCRA Area.

Data Collected and Field Activities Conducted during the Period

- On July 13, the former Plainwell Impoundment TCRA Area Transects T00 and T01 were surveyed. Data are presented in Table A. T00 is a new transect near the former Plainwell Dam that was surveyed at the request of MDNRE. MDNRE requested this verbally on May 6.

**Monthly Progress Report for the Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site SRI/FS – Area 1 and 2**

REPORT #41, JULY 2010

Laboratory Data Received during the Period

- On July 27, MDNRE forwarded to ARCADIS the available portion of site-related data from the most recent Michigan Fish Contaminant Monitoring Program sampling on the Kalamazoo River. Georgia-Pacific LLC awaits the remainder of the data from the most recent sampling.
- Validated data for the laboratory sample delivery groups (SDGs) received in May are included in this monthly report. These data include the PCB results from TestAmerica Laboratories, Inc. for the 15 groundwater and two surface water samples collected in the former Plainwell Impoundment TCRA Area in April (SDG KAL544) (Table B). In accordance with Section 2.1 of the SOW, paper and electronic copies of these laboratory data are included as part of the monthly progress reports. Attachment A contains the validation reports for these data packages. The enclosed compact disk also contains the electronic data deliverables for these data.

Problems

- Transect T01, to be surveyed in the former Plainwell Impoundment TCRA Area as part of the bathymetric work performed in May, could not be surveyed on May 19th due to high flow conditions. Flows remained high (>1,000 cubic feet per second at Comstock) in June.

Actions Taken to Correct Problems

- Transect T01 and the new transect T00 were surveyed in July when flow conditions allowed it to be performed safely.

Developments Anticipated during the Next Two Reporting Periods

- In August, ARCADIS expects to have a complete set of TRVs for use in the Area 1 BERA that has been agreed upon with representatives of USEPA, USFWS, and MDNRE.
- On August 5, the TRV work group is scheduled to have a teleconference to finalize egg-based TRVs for the Area 1 BERA.
- By August 15, ARCADIS is scheduled to submit to USEPA the Semi-Annual Progress Report for the period from February through July 2010. This submittal is discussed in Section 7.2 of the SOW.
- On August 17, USEPA and ARCADIS are scheduled to meet in Detroit to discuss the draft Area 2/Otsego City Impoundment SRI/FS Work Plan.

**Monthly Progress Report for the Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site SRIFS – Area 1 and 2**

REPORT #41, JULY 2010

- In August or September, ARCADIS expects to schedule a meeting with the Exposure Point Concentration (EPC) work group (consisting of representatives of USEPA, USFWS, and MDNRE) in Chicago to discuss the development of exposure units and EPC for the Area 1 BERA.

Georgia-Pacific LLC
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Supplemental Remedial Investigations/Feasibility Studies
Monthly Report #41, July 2010

Table A — Plainwell TCRA Area — Bathymetric Data Collected in July 2010

Transect	Station	Northing	Easting	Distance from North Bank (ft)	Water Depth (ft)	Water Elevation (ft)	Sediment Elevation (ft)
T00	0+00	351084.8	12772085.9	0	0.0	699.3	-
T00	0+10	351083.6	12772076.0	10	0.9	-	698.4
T00	0+20	351082.4	12772066.1	20	3.9	-	695.4
T00	0+30	351081.1	12772056.2	30	5.2	-	694.1
T00	0+40	351079.9	12772046.2	40	4.8	-	694.5
T00	0+50	351078.7	12772036.3	50	5.5	-	693.8
T00	0+60	351077.5	12772026.4	60	5.2	-	694.1
T00	0+70	351076.3	12772016.5	70	5.7	-	693.6
T00	0+80	351075.0	12772006.5	80	5.8	-	693.5
T00	0+90	351073.8	12771996.6	90	2.9	-	696.4
T00	1+00	351072.6	12771986.7	100	0.4	-	698.9
T00	1+00	351072.5	12771986.1	100	0.0	699.3	-
T01	0+00	350825.9	12772273.7	0	0.0	699.9	-
T01	0+10	350825.8	12772263.7	10	4.1	-	695.8
T01	0+20	350825.7	12772253.7	20	5.5	-	694.4
T01	0+30	350825.7	12772243.7	30	1.6	-	698.3
T01	0+40	350825.6	12772233.7	40	1.6	-	698.3
T01	0+50	350825.5	12772223.7	50	1.6	-	698.3
T01	0+60	350825.5	12772213.7	60	1.5	-	698.4
T01	0+70	350825.4	12772203.7	70	1.5	-	698.4
T01	0+80	350825.3	12772193.7	80	1.4	-	698.5
T01	0+90	350825.3	12772183.7	90	2.5	-	697.4
T01	1+00	350825.2	12772173.7	100	1.3	-	698.6
T01	1+10	350825.1	12772163.7	110	1.2	-	698.7
T01	1+20	350825.1	12772153.7	120	2.0	-	697.9
T01	1+30	350825.0	12772143.7	130	1.7	-	698.2
T01	1+40	350824.9	12772133.7	140	0.4	-	699.5
T01	1+50	350824.9	12772123.7	150	1.2	-	698.7
T01	1+60	350824.8	12772113.7	160	3.1	-	696.8
T01	1+70	350824.7	12772103.7	170	1.9	-	698.0
T01	1+80	350824.7	12772093.7	180	0.3	-	699.6
T01	1+80	350824.7	12772093.3	180	0.0	699.9	-

Notes:

1. Elevations based on the National Geodetic Vertical Datum of 1929.
2. Coordinates are based on the North American Datum of 1983 - Michigan South Zone - International Foot.
3. Coordinates and elevations were obtained using GPS methods.

Georgia-Pacific LLC
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Supplemental Remedial Investigations/Feasibility Studies
Monthly Report #41, July 2010

Table B — Validated PCB Results for Groundwater and Surface Water Samples Collected in the Plainwell TCRA — Data Received in May 2010

Sample Name: Date Collected: Location ID:	Units	TS31012 [TS31013] 04/05/10 SG-5	TS31014 04/09/10 SG-5	TS40068 04/05/10 MW-15	TS40071 04/06/10 MW-10	TS40072 04/06/10 MW-11	TS40073 [TS40074] 04/06/10 MW-14	TS40075 04/06/10 MW-12	TS40076 04/07/10 MW-13	TS40077 04/07/10 MW-5
PCBs										
Aroclor-1016	ug/L	0.049 U [0.048 U]	0.049 U	0.047 U	0.051 U	0.051 U	0.048 U [0.048 U]	0.051 U	0.048 U	0.047 U
Aroclor-1221	ug/L	0.049 U [0.048 U]	0.049 U	0.047 U	0.051 U	0.051 U	0.048 U [0.048 U]	0.051 U	0.048 U	0.047 U
Aroclor-1232	ug/L	0.049 U [0.048 U]	0.049 U	0.047 U	0.051 U	0.051 U	0.048 U [0.048 U]	0.051 U	0.048 U	0.047 U
Aroclor-1242	ug/L	0.049 U [0.048 U]	0.049 U	0.047 U	0.051 U	0.051 U	0.048 U [0.048 U]	0.051 U	0.048 U	0.047 U
Aroclor-1248	ug/L	0.049 U [0.048 U]	0.049 U	0.047 U	0.051 U	0.051 U	0.048 U [0.048 U]	0.051 U	0.048 U	0.047 U
Aroclor-1254	ug/L	0.049 U [0.048 U]	0.049 U	0.047 U	0.051 U	0.051 U	0.048 U [0.048 U]	0.051 U	0.048 U	0.047 U
Aroclor-1260	ug/L	0.049 U [0.048 U]	0.049 U	0.047 U	0.051 U	0.051 U	0.048 U [0.048 U]	0.051 U	0.048 U	0.047 U
Total PCB	ug/L	0.049 U [0.048 U]	0.049 U	0.047 U	0.051 U	0.051 U	0.048 U [0.048 U]	0.051 U	0.048 U	0.047 U
Inorganics										
Calcium	ug/L	80,500 [85,500]	83,400	108,000	246,000	103,000	176,000 [168,000]	154,000	116,000	356,000
Magnesium	ug/L	22,300 [23,800]	22,900	27,900	30,700	24,200	40,000 [38,200]	31,600	28,000	77,400
Potassium	ug/L	2,490 B [2,670 B]	2,510 B	2,560 B	1,140 B	1,930 B	1,130 B [1,150 B]	5,440	2,120 B	3,530 B
Sodium	ug/L	29,600 [31,400]	28,300	36,600	49,000	35,000	35,300 [33,500]	11,900	73,400	54,400
Miscellaneous										
Alkalinity	mg/L	230 [240]	230	260	450	270	230 [220]	360	330	390
Chloride	mg/L	56 [58]	47	39	75	60	50 [50]	12	110	68
Sulfate	mg/L	35 [36]	30	110	220	79	330 [340]	110	46	770
Total Dissolved Solids	mg/L	310 [343]	397	483	922	458	793 [769]	601	544	1,620
Total Organic Carbon	mg/L	6.3 [6.4]	6.3	2.2	15	3.3	2.8 [2.9]	22.6	3.3	7.5
Total Suspended Solids	mg/L	15.7 [15.9]	23.9	8.6	10.9	12.8	13.1 [14.4]	0.5 U	15	15.5

See Notes on Page 2.

Georgia-Pacific LLC
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Supplemental Remedial Investigations/Feasibility Studies
Monthly Report #41, July 2010

Table B — Validated PCB Results for Groundwater and Surface Water Samples Collected in the Plainwell TCRA — Data Received in May 2010

Sample Name: Date Collected: Location ID:	Units	TS40078 04/07/10 MW-4	TS40079 04/07/10 MW-9	TS40080 04/08/10 MW-8	TS40081 04/08/10 MW-2	TS40082 04/08/10 MW-7	TS40083 [TS40084] 04/08/10 MW-2	TS40085 04/08/10 MW-6	TS40087 04/09/10 MW-1
PCBs									
Aroclor-1016	ug/L	0.048 U	0.048 U	0.048 U	0.049 U	0.048 U	0.048 U [0.048 U]	0.048 U	0.049 U
Aroclor-1221	ug/L	0.048 U	0.048 U	0.048 U	0.049 U	0.048 U	0.048 U [0.048 U]	0.048 U	0.049 U
Aroclor-1232	ug/L	0.048 U	0.048 U	0.048 U	0.049 U	0.048 U	0.048 U [0.048 U]	0.048 U	0.049 U
Aroclor-1242	ug/L	0.048 U	0.048 U	0.048 U	0.049 U	0.048 U	0.048 U [0.048 U]	0.048 U	0.049 U
Aroclor-1248	ug/L	0.048 U	0.048 U	0.048 U	0.049 U	0.048 U	0.048 U [0.048 U]	0.048 U	0.049 U
Aroclor-1254	ug/L	0.048 U	0.048 U	0.048 U	0.049 U	0.048 U	0.048 U [0.048 U]	0.048 U	0.049 U
Aroclor-1260	ug/L	0.048 U	0.048 U	0.048 U	0.049 U	0.048 U	0.048 U [0.048 U]	0.048 U	0.049 U
Total PCB	ug/L	0.048 U	0.048 U	0.048 U	0.049 U	0.048 U	0.048 U [0.048 U]	0.048 U	0.049 U
Inorganics									
Calcium	ug/L	179,000	85,400	110,000	154,000	160,000	149,000 [152,000]	115,000	455,000
Magnesium	ug/L	39,700	22,200	27,400	34,900	34,000	29,600 [30,300]	24,500	146,000
Potassium	ug/L	2,600 B	1,950 B	2,220 B	2,230 B	1,990 B	1,920 B [2,000 B]	1,670 B	5,770
Sodium	ug/L	70,300	54,800	86,600	73,100	74,000	72,100 [74,000]	68,600	44,700
Miscellaneous									
Alkalinity	mg/L	350	260	290	350	330	350 [340]	280	350
Chloride	mg/L	110	83	130	110	120	120 J [29 J]	110	34
Sulfate	mg/L	220	38	68	140	150	110 J [21 J]	87	1,200
Total Dissolved Solids	mg/L	836	404	649	803	807	761 [754]	643	2,470
Total Organic Carbon	mg/L	4.9	1.5	2.3	5.2	4.8	5.1 [5.2]	4.5	11
Total Suspended Solids	mg/L	12.1	4.4	9.5	17.3	19.3	21.1 [20.9]	17.9	44.2

Notes:

B - The reported value was obtained from a reading less than the contact required detection limit (CRDL) but greater than or equal to the instrument detection limit (IDL).

J - The compound was positively identified; however, the associated numerical value is an estimated concentration only.

U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

mg/L - milligrams per liter.

ug/L - micrograms per liter.

Samples analyzed by TestAmerica Laboratories, Inc.

Duplicate results are in brackets.

ARCADIS

Attachment A

Validation Report

Kalamazoo River Superfund Site Plainwell Ground Waters

Data Review

PLAINWELL, MICHIGAN

PCB, Metals and Miscellaneous Analyses

SDG# KAL544

Analyses Performed By:
TestAmerica Laboratories
Burlington, Vermont

Report: # 12122R
Review Level: Tier II
Project: B0064539.0001.00500

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #KAL544 for samples collected in association with the Plainwell site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
TS31012	825001	Ground Water	4/5/2010				X	X	X
TS31013	825002	Ground Water	4/5/2010	TS31012			X	X	X
TS40068	825003	Ground Water	4/5/2010				X	X	X
TS40071	825171	Ground Water	4/6/2010				X	X	X
TS40073	825172	Ground Water	4/6/2010				X	X	X
TS40074	825173	Ground Water	4/6/2010	TS40073			X	X	X
TS40072	825174	Ground Water	4/6/2010				X	X	X
TS40075	825175	Ground Water	4/6/2010				X	X	X
TS40076	825368	Ground Water	4/7/2010				X	X	X
TS40077	825369	Ground Water	4/7/2010				X	X	X
TS40078	825370	Ground Water	4/7/2010				X	X	X
TS40079	825371	Ground Water	4/7/2010				X	X	X
TS40081	825624	Ground Water	4/8/2010				X	X	X
TS40082	825625	Ground Water	4/8/2010				X	X	X
TS40083	825626	Ground Water	4/8/2010				X	X	X
TS40084	825627	Ground Water	4/8/2010	TS40083			X	X	X
TS40085	825628	Ground Water	4/8/2010				X	X	X
TS40080	825629	Ground Water	4/8/2010				X	X	X
TS31014	825882	Ground Water	4/9/2010				X	X	X
TS40087	825883	Ground Water	4/9/2010				X	X	X

Note:

1. Miscellaneous parameters include total organic carbon (TOC), total suspended solids (TSS), total dissolved solids (TDS), chloride, sulfate, and alkalinity.
2. Matrix spike/matrix spike duplicate/laboratory duplicate was performed on sample locations TS40068 and TS31014.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to (United States Environmental Protection Agency) USEPA Method 8082. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999 and USEPA Region II (SOP HW-45, Revision 1).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
 - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
 - E The compound was quantitated above the calibration range.
 - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
 - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
 - UB Compound considered non-detect at the listed value due to associated blank contamination.
 - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

The data presented in this package has been derived using a procedure developed by TestAmerica as an attempt to improve the analytical process of calibration, identification and quantitation of PCBs as Aroclors. Key components of this procedure include:

Calibration

The response function of the electron capture detector is inherently non-linear. While significant linearization is achieved for this detector by electronic means, some non-linearity remains. Power function linearization is used to straighten the curve and allow the use of response factors for calibration purposes.

During the initial calibration, a response factor is calculated for each peak in the individual Aroclors. A weighted response factor calculation has been used to adjust for non-linearity at the low end of the calibration curve.

Identification

Peak retention times are relative. Retention times are in set windows relative to the time markers DCB and TCX. Time markers adjust for minor variations in column flow or instrument condition and allow the use of very tight windows which minimizes the number of false positive and false negative peak identifications.

The determination of which Aroclor or mixture of Aroclors will produce a chromatogram most similar to that of the residue is made by expressing the unknown sample chromatogram as a linear combination of the Aroclors. The most similar Aroclor or mixture of Aroclors is determined by using a least squares minimization of the difference between the unknown chromatogram and the linear combination of Aroclors. This is similar to the procedure presented by L.E. Silvon, P.M. Schumacher and A. Alford-Stevens for the determination of Aroclor composition from GC/MS level of chlorination results.

Identification/quantitation of Aroclors in samples is based on the combined response of two columns, typically RTX-5 and RTX-35. The pooling of response combines the unique qualities of both columns to derive a more defined Aroclor pattern which is less likely to be affected by interferences. Identification/quantitation data for the individual columns is provided in the package and can be used as a check on the combined column results.

POLYCHLORINATED BIPHENYLS (PCBs) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8082	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cooled @ 4 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cooled @ 4 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

Compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. PCB analysis requires the surrogate compounds must exhibited recoveries within the method established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Surrogate	Column 1 Recovery	Column 2 Recovery
TS40082	Tetrachloro-m-xylene	AC	<LL but >10%
TS40084	Decachlorobiphenyl	AC	AC

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J

Control Limit	Sample Result	Qualification
< the lower control limit (LL) but > 10%	Non-detect	J
	Detect	J
< 10%	Non-detect	R
	Detect	J
One surrogate exhibiting recovery outside the control limits but > 10%	Non-detect	No Action
	Detect	

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the method established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the method established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the method established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
TS31012/TS31013	All Aroclors	0.049 U	0.048 U	AC
TS40073/TS40074	All Aroclors	0.048 U	0.048 U	AC
TS40083/TS40084	All Aroclors	0.048 U	0.047 U	AC

AC Acceptable
U Not detected

The calculated RPDs between the parent sample and field duplicate were acceptable.

7. Compound Identification

The determination of Aroclor presence is made by expressing the unknown sample chromatogram as a linear combination of the Aroclors. The most similar Aroclor or mixture of Aroclors is determined by using a least squares minimization of the difference between the unknown chromatogram and the linear combination of Aroclors.

These identifications were not reviewed by the data validator.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR PCBs

PCBs; SW846 8082	Reported		Performance Acceptable		Not Required	
	No	Yes	No	Yes		
GAS CHROMATOGRAPHY (GC/FID)						
Tier II Validation						
Holding times		X		X		
Reporting limits (units)		X		X		
Blanks						
A. Method blanks		X		X		
B. Field blanks					X	
Laboratory Control Sample (LCS) %R		X		X		
Laboratory Control Sample Duplicate(LCSD) %R					X	
LCS/LCSD Precision (RPD)					X	
Matrix Spike (MS) %R		X		X		
Matrix Spike Duplicate(MSD) %R		X		X		
MS/MSD Precision (RPD)		X		X		
Field Duplicate (RPD)		X		X		
Surrogate Spike Recoveries		X	X			
Dilution Factor		X		X		
Moisture Content		X		X		

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Methods 6010B, 300.0, 310.1 SM5310, and SM2540. Data were reviewed in accordance with USEPA National Functional Guidelines of October 2004.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

- U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

- B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

- E The reported value is estimated due to the presence of interference.

- N Spiked sample recovery is not within control limits.

- * Duplicate analysis is not within control limits.

- Validation Qualifiers

- J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

- UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

- UB Analyte considered non-detect at the listed value due to associated blank contamination.

- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010B	Water	180 days from collection to analysis	Cooled @ 4 °C; preserved to a pH of less than 2.
	Soil	180 days from collection to analysis	Cooled @ 4 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the instrument detection limit (IDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were detected in the associated QA blanks; however, the associated sample results were greater than the BAL and/or were non-detect. No qualification of the sample results was required.

3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier "N" will be removed.

The MS analysis performed on sample locations TS40068 and TS31014 exhibited recoveries within the control limits.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the

parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices and two times the CRDL for soil matrices.

The laboratory duplicate sample results exhibited RPD within the control limit.

4.0 Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
TS31012/TS31013	Calcium	80500	85500	6.0 %
	Magnesium	22300	23800	6.5 %
	Potsassium	2490 B	2670 B	6.9 %
	Sodium	29600	31400	5.9 %
TS40073/TS40074	Calcium	176000	168000	4.6 %
	Magnesium	40000	38200	4.6 %
	Potsassium	1130 B	1150 B	1.7 %
	Sodium	35300	33500	5.2 %
TS40083/TS40084	Calcium	149000	152000	1.9 %
	Magnesium	29600	30300	2.3 %
	Potsassium	1920 B	2000 B	4.0 %
	Sodium	72100	74000	2.6 %

AC Acceptable
U Not detected

The calculated RPDs between the parent sample and field duplicate were acceptable.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. Furnace Analysis QC

No furnace analyses were performed on the samples.

7. Method of Standard Additions (MSA)

No samples were analyzed following the method of standard additions.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS; SW-846 6000/7000	Reported		Performance Acceptable		Not Required	
	No	Yes	No	Yes		
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP)						
Atomic Absorption – Manual Cold Vapor (CV)						
Tier II Validation						
Holding Times		X		X		
Reporting limits (units)		X		X		
Blanks						
A. Instrument Blanks		X		X		
B. Method Blanks		X		X		
C. Equipment/Field Blanks					X	
Laboratory Control Sample (LCS)		X		X		
Matrix Spike (MS) %R		X		X		
Matrix Spike Duplicate (MSD) %R					X	
MS/MSD Precision (RPD)					X	
Field/Lab Duplicate (RPD)		X		X		
Reporting Limit Verification		X		X		
Raw Data		X		X		

%R Percent recovery

RPD Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Total Organic Carbon by SM5310	Water	28 days from collection to analysis	Cooled @ 4 °C; preserved to a pH of less than 2.
Total Dissolved Solids By SM2540	Water	7 days from collection to analysis	Cooled @ 4 °C.
Total Suspended Solids By SM2540	Water	7 days from collection to analysis	Cooled @ 4 °C.
Chloride by EPA 300.0	Water	28 days from collection to analysis	Cooled @ 4 °C.
Sulfate by EPA 300.0	Water	28 days from collection to analysis	Cooled @ 4 °C.
Alkalinity by EPA 310.1	Water	14 days from collection to analysis	Cooled @ 4 °C.

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were detected in the associated QA blanks; however, the associated sample results were greater than the BAL. No qualification of the sample results was required.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 and all initial calibration verification standard recoveries were within control limits.

All calibration standard recoveries were within the control limit.

4. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier "N" will be removed.

The MS analysis performed on sample location TS40068 and TS31014 exhibited recoveries within the control limits.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices and two times the CRDL for soil matrices.

The laboratory duplicate sample results exhibited a RPD within the control limit.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
TS31012/TS31013	TOC	6.3	6.4	1.5%
	TDS	310	343	10.1%
	TSS	15.7	15.9	1.2%
	Chloride	56	58	3.5%
	Sulfate	35	36	2.8%
	Alkalinity	230	240	4.2%
TS40073/TS40074	TOC	2.8	2.9	AC
	TDS	793	769	3.0%
	TSS	13.1	14.4	9.4%
	Chloride	50	50	0%

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
	Sulfate	330	340	2.9%
	Alkalinity	230	220	4.4%
TS40083/TS40084	TOC	5.1	5.2	1.9%
	TDS	761	754	0.8%
	TSS	21.1	20.9	0.6%
	Chloride	120	29	NC
	Sulfate	110	21	NC
	Alkalinity	350	340	2.8%

AC Acceptable
U Not detected

The analytes chloride and sulfate associated with samples locations TS40083 and TS40084 exhibited a field duplicate RPD greater than the control limit. The associated sample results from sample locations for the listed analyte were qualified as estimated.

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA 300.0, 310.1, SM5310, and SM2540	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Field blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Lab/Field Duplicate (RPD)		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	

%D – difference

RPD Relative percent difference

VALIDATION PERFORMED

BY: Jeffrey L. Davin

SIGNATURE:



DATE: May 13, 2010

PEER REVIEW: Dennis Capria

DATE: June 30, 2010

**CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS**

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS31012

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825001

Phase Weight: 1030. (mL)

Date Received: 04/06/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/08/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.049	U
11104-28-2	Aroclor-1221	0.049	U
11141-16-5	Aroclor-1232	0.049	U
53469-21-9	Aroclor-1242	0.049	U
12672-29-6	Aroclor-1248	0.049	U
11097-69-1	Aroclor-1254	0.049	U
11096-82-5	Aroclor-1260	0.049	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS31013

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825002

Phase Weight: 1040. (mL)

Date Received: 04/06/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/08/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.048	U
11104-28-2	Aroclor-1221	0.048	U
11141-16-5	Aroclor-1232	0.048	U
53469-21-9	Aroclor-1242	0.048	U
12672-29-6	Aroclor-1248	0.048	U
11097-69-1	Aroclor-1254	0.048	U
11096-82-5	Aroclor-1260	0.048	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40068

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825003

Phase Weight: 1060. (mL)

Date Received: 04/06/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/08/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.047	U
11104-28-2	Aroclor-1221	0.047	U
11141-16-5	Aroclor-1232	0.047	U
53469-21-9	Aroclor-1242	0.047	U
12672-29-6	Aroclor-1248	0.047	U
11097-69-1	Aroclor-1254	0.047	U
11096-82-5	Aroclor-1260	0.047	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40071

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825171

Phase Weight: 975. (mL)

Date Received: 04/07/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/08/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.051	U
11104-28-2	Aroclor-1221	0.051	U
11141-16-5	Aroclor-1232	0.051	U
53469-21-9	Aroclor-1242	0.051	U
12672-29-6	Aroclor-1248	0.051	U
11097-69-1	Aroclor-1254	0.051	U
11096-82-5	Aroclor-1260	0.051	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40073

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825172

Phase Weight: 1050. (mL)

Date Received: 04/07/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/08/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.048	U
11104-28-2	Aroclor-1221	0.048	U
11141-16-5	Aroclor-1232	0.048	U
53469-21-9	Aroclor-1242	0.048	U
12672-29-6	Aroclor-1248	0.048	U
11097-69-1	Aroclor-1254	0.048	U
11096-82-5	Aroclor-1260	0.048	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40074

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825173

Phase Weight: 1050. (mL)

Date Received: 04/07/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/08/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.048	U
11104-28-2	Aroclor-1221	0.048	U
11141-16-5	Aroclor-1232	0.048	U
53469-21-9	Aroclor-1242	0.048	U
12672-29-6	Aroclor-1248	0.048	U
11097-69-1	Aroclor-1254	0.048	U
11096-82-5	Aroclor-1260	0.048	U

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40072

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825174

Phase Weight: 980. (mL)

Date Received: 04/07/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/08/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.051	U
11104-28-2	Aroclor-1221	0.051	U
11141-16-5	Aroclor-1232	0.051	U
53469-21-9	Aroclor-1242	0.051	U
12672-29-6	Aroclor-1248	0.051	U
11097-69-1	Aroclor-1254	0.051	U
11096-82-5	Aroclor-1260	0.051	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40075

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825175

Phase Weight: 975. (mL)

Date Received: 04/07/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/08/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.051	U
11104-28-2	Aroclor-1221	0.051	U
11141-16-5	Aroclor-1232	0.051	U
53469-21-9	Aroclor-1242	0.051	U
12672-29-6	Aroclor-1248	0.051	U
11097-69-1	Aroclor-1254	0.051	U
11096-82-5	Aroclor-1260	0.051	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40076

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825368

Phase Weight: 1045. (mL)

Date Received: 04/08/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/13/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.048	U
11104-28-2	Aroclor-1221	0.048	U
11141-16-5	Aroclor-1232	0.048	U
53469-21-9	Aroclor-1242	0.048	U
12672-29-6	Aroclor-1248	0.048	U
11097-69-1	Aroclor-1254	0.048	U
11096-82-5	Aroclor-1260	0.048	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40077

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825369

Phase Weight: 1060. (mL)

Date Received: 04/08/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/13/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.047	U
11104-28-2	Aroclor-1221	0.047	U
11141-16-5	Aroclor-1232	0.047	U
53469-21-9	Aroclor-1242	0.047	U
12672-29-6	Aroclor-1248	0.047	U
11097-69-1	Aroclor-1254	0.047	U
11096-82-5	Aroclor-1260	0.047	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40078

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825370

Phase Weight: 1045. (mL)

Date Received: 04/08/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/13/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.048	U
11104-28-2	Aroclor-1221	0.048	U
11141-16-5	Aroclor-1232	0.048	U
53469-21-9	Aroclor-1242	0.048	U
12672-29-6	Aroclor-1248	0.048	U
11097-69-1	Aroclor-1254	0.048	U
11096-82-5	Aroclor-1260	0.048	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40079

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825371

Phase Weight: 1040. (mL)

Date Received: 04/08/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/13/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.048	U
11104-28-2	Aroclor-1221	0.048	U
11141-16-5	Aroclor-1232	0.048	U
53469-21-9	Aroclor-1242	0.048	U
12672-29-6	Aroclor-1248	0.048	U
11097-69-1	Aroclor-1254	0.048	U
11096-82-5	Aroclor-1260	0.048	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40081

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825624

Phase Weight: 1030. (mL)

Date Received: 04/09/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/13/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.049	U
11104-28-2	Aroclor-1221	0.049	U
11141-16-5	Aroclor-1232	0.049	U
53469-21-9	Aroclor-1242	0.049	U
12672-29-6	Aroclor-1248	0.049	U
11097-69-1	Aroclor-1254	0.049	U
11096-82-5	Aroclor-1260	0.049	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40082

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825625

Phase Weight: 1040. (mL)

Date Received: 04/09/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/13/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.048	U
11104-28-2	Aroclor-1221	0.048	U
11141-16-5	Aroclor-1232	0.048	U
53469-21-9	Aroclor-1242	0.048	U
12672-29-6	Aroclor-1248	0.048	U
11097-69-1	Aroclor-1254	0.048	U
11096-82-5	Aroclor-1260	0.048	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40083

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825626

Phase Weight: 1045. (mL)

Date Received: 04/09/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/13/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.048	U
11104-28-2	Aroclor-1221	0.048	U
11141-16-5	Aroclor-1232	0.048	U
53469-21-9	Aroclor-1242	0.048	U
12672-29-6	Aroclor-1248	0.048	U
11097-69-1	Aroclor-1254	0.048	U
11096-82-5	Aroclor-1260	0.048	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40084

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825627

Phase Weight: 1050. (mL)

Date Received: 04/09/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/13/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.048	U
11104-28-2	Aroclor-1221	0.048	U
11141-16-5	Aroclor-1232	0.048	U
53469-21-9	Aroclor-1242	0.048	U
12672-29-6	Aroclor-1248	0.048	U
11097-69-1	Aroclor-1254	0.048	U
11096-82-5	Aroclor-1260	0.048	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40085

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825628

Phase Weight: 1050. (mL)

Date Received: 04/09/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/13/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.048	U
11104-28-2	Aroclor-1221	0.048	U
11141-16-5	Aroclor-1232	0.048	U
53469-21-9	Aroclor-1242	0.048	U
12672-29-6	Aroclor-1248	0.048	U
11097-69-1	Aroclor-1254	0.048	U
11096-82-5	Aroclor-1260	0.048	U

FORM 1
AROCLOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40080

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825629

Phase Weight: 1045. (mL)

Date Received: 04/09/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/13/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.048	U
11104-28-2	Aroclor-1221	0.048	U
11141-16-5	Aroclor-1232	0.048	U
53469-21-9	Aroclor-1242	0.048	U
12672-29-6	Aroclor-1248	0.048	U
11097-69-1	Aroclor-1254	0.048	U
11096-82-5	Aroclor-1260	0.048	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS31014

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825882

Phase Weight: 1030. (mL)

Date Received: 04/10/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/13/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.049	U
11104-28-2	Aroclor-1221	0.049	U
11141-16-5	Aroclor-1232	0.049	U
53469-21-9	Aroclor-1242	0.049	U
12672-29-6	Aroclor-1248	0.049	U
11097-69-1	Aroclor-1254	0.049	U
11096-82-5	Aroclor-1260	0.049	U

FORM 1
AROCOR ANALYSIS DATA SHEET

EPA SAMPLE NO.

TS40087

Lab Name: TestAmerica Burlington

Lab Code: STLV

Contract: 27000

Case: KZOO

SDG: KAL544

Phase Type: WATER

Lab Sample ID: 825883

Phase Weight: 1015. (mL)

Date Received: 04/10/10

Injection Volume: 1.0 (uL)

Date Extracted: 04/13/10

Dilution Factor: 1.0

Date Analyzed: 04/29/10

% Solids: _____

Sulfur Clean-up: N (Y/N)

CAS NO.	COMPOUND	CONCENTRATION ug/L	QUALIFIER
12674-11-2	Aroclor-1016	0.049	U
11104-28-2	Aroclor-1221	0.049	U
11141-16-5	Aroclor-1232	0.049	U
53469-21-9	Aroclor-1242	0.049	U
12672-29-6	Aroclor-1248	0.049	U
11097-69-1	Aroclor-1254	0.049	U
11096-82-5	Aroclor-1260	0.049	U

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS31012

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825001
Level (low/med): LOW Date Received: 4/6/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	80500			P
7439-95-4	Magnesium	22300			P
7440-23-5	Sodium	29600			P
7440-09-7	Potassium	2490	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS31013

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825002
Level (low/med): LOW Date Received: 4/6/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	85500			P
7439-95-4	Magnesium	23800			P
7440-23-5	Sodium	31400			P
7440-09-7	Potassium	2670	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40068

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825003
Level (low/med): LOW Date Received: 4/6/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	108000			P
7439-95-4	Magnesium	27900			P
7440-23-5	Sodium	36600			P
7440-09-7	Potassium	2560	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40071

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825171
Level (low/med): LOW Date Received: 4/7/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	246000			P
7439-95-4	Magnesium	30700			P
7440-23-5	Sodium	49000			P
7440-09-7	Potassium	1140	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40072

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825174
Level (low/med): LOW Date Received: 4/7/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	103000			P
7439-95-4	Magnesium	24200			P
7440-23-5	Sodium	35000			P
7440-09-7	Potassium	1930	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40073

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825172
Level (low/med): LOW Date Received: 4/7/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	176000			P
7439-95-4	Magnesium	40000			P
7440-23-5	Sodium	35300			P
7440-09-7	Potassium	1130	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40074

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825173
Level (low/med): LOW Date Received: 4/7/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	168000			P
7439-95-4	Magnesium	38200			P
7440-23-5	Sodium	33500			P
7440-09-7	Potassium	1150	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40075

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825175
Level (low/med): LOW Date Received: 4/7/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	154000			P
7439-95-4	Magnesium	31600			P
7440-23-5	Sodium	11900			P
7440-09-7	Potassium	5440			P

Color Before: light yellow Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40076

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825368
Level (low/med): LOW Date Received: 4/8/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	116000			P
7439-95-4	Magnesium	28000			P
7440-23-5	Sodium	73400			P
7440-09-7	Potassium	2120	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40077

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825369
Level (low/med): LOW Date Received: 4/8/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	356000			P
7439-95-4	Magnesium	77400			P
7440-23-5	Sodium	54400			P
7440-09-7	Potassium	3530	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40078

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825370
Level (low/med): LOW Date Received: 4/8/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	179000			P
7439-95-4	Magnesium	39700			P
7440-23-5	Sodium	70300			P
7440-09-7	Potassium	2600	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40079

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825371
Level (low/med): LOW Date Received: 4/8/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	85400			P
7439-95-4	Magnesium	22200			P
7440-23-5	Sodium	54800			P
7440-09-7	Potassium	1950	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40080

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825629
Level (low/med): LOW Date Received: 4/9/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	110000			P
7439-95-4	Magnesium	27400			P
7440-23-5	Sodium	86600			P
7440-09-7	Potassium	2220	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40081

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZ00 SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825624
Level (low/med): LOW Date Received: 4/9/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	154000			P
7439-95-4	Magnesium	34900			P
7440-23-5	Sodium	73100			P
7440-09-7	Potassium	2230	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40082

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZ00 SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825625
Level (low/med): LOW Date Received: 4/9/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	160000			P
7439-95-4	Magnesium	34000			P
7440-23-5	Sodium	74000			P
7440-09-7	Potassium	1990	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40083

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825626
Level (low/med): LOW Date Received: 4/9/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	149000			P
7439-95-4	Magnesium	29600			P
7440-23-5	Sodium	72100			P
7440-09-7	Potassium	1920	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40084

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825627
Level (low/med): LOW Date Received: 4/9/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	152000			P
7439-95-4	Magnesium	30300			P
7440-23-5	Sodium	74000			P
7440-09-7	Potassium	2000	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS40085

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825628
Level (low/med): LOW Date Received: 4/9/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	115000			P
7439-95-4	Magnesium	24500			P
7440-23-5	Sodium	68600			P
7440-09-7	Potassium	1670	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

TS31014

Lab Name: TestAmerica Burlington Contract: 29000
Lab Code: STLVT Case No.: KZOO SAS No.: _____ SDG No.: KAL544
Matrix (soil/water): WATER Lab Sample ID: 825882
Level (low/med): LOW Date Received: 4/10/2010
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	83400			P
7439-95-4	Magnesium	22900			P
7440-23-5	Sodium	28300			P
7440-09-7	Potassium	2510	B		P

Color Before: colorless Clarity Before: clear Texture: _____
Color After: light yellow Clarity After: clear Artifacts: _____

Comments: _____

-1-

EPA SAMPLE NO.

TS40087

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-70-2	Calcium	455000			P
7439-95-4	Magnesium	146000			P
7440-23-5	Sodium	44700			P
7440-09-7	Potassium	5770			P

Comments:

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS31012

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825001

Matrix: WATER

Client: BBLKAL

Date Received: 04/06/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/09/10	BLKDS040910A	mg/L	1	5.0	310	
2540	Total Suspended Solids	04/09/10	BLKTS040910A	mg/L	0	0.50	15.7	
5310	Organic Carbon, Total	04/08/10	BLKTO040810A	mg/L	1	1.0	6.3	

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS31013

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825002

Matrix: WATER

Client: BBLKAL

Date Received: 04/06/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/09/10	BLKDS040910A	mg/L	1	5.0	343	
2540	Total Suspended Solids	04/09/10	BLKTS040910A	mg/L	0	0.71	15.9	
5310	Organic Carbon, Total	04/08/10	BLKTO040810A	mg/L	1	1.0	6.4	

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS40068

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825003

Matrix: WATER

Client: BBLKAL

Date Received: 04/06/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/09/10	BLKDS040910A	mg/L	1	5.0	483	
2540	Total Suspended Solids	04/09/10	BLKTS040910A	mg/L	0	0.50	8.6	
5310	Organic Carbon, Total	04/08/10	BLKTO040810A	mg/L	1	1.0	2.2	

WET CHEMISTRY

Sample Report Summary

Client Sample No. _____

TS40071

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825171

Matrix: WATER

Client: BBLKAL

Date Received: 04/07/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/09/10	BLKDS040910A	mg/L	1	5.0	922	
2540	Total Suspended Solids	04/09/10	BLKTS040910A	mg/L	0	0.50	10.9	
5310	Organic Carbon, Total	04/08/10	BLKTO040810A	mg/L	1	1.0	15.0	

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS40073

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825172

Matrix: WATER

Client: BBLKAL

Date Received: 04/07/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/09/10	BLKDS040910A	mg/L	1	5.0	793	
2540	Total Suspended Solids	04/09/10	BLKTS040910A	mg/L	0	0.50	13.1	
5310	Organic Carbon, Total	04/08/10	BLKTO040810A	mg/L	1	1.0	2.8	

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS40074

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825173

Matrix: WATER

Client: BBLKAL

Date Received: 04/07/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/09/10	BLKDS040910A	mg/L	1	5.0	769	
2540	Total Suspended Solids	04/09/10	BLKTS040910A	mg/L	0	0.50	14.4	
5310	Organic Carbon, Total	04/08/10	BLKTO040810A	mg/L	1	1.0	2.9	

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS40072

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825174

Matrix: WATER

Client: BBLKAL

Date Received: 04/07/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/09/10	BLKDS040910A	mg/L	1	5.0	458	
2540	Total Suspended Solids	04/09/10	BLKTS040910A	mg/L	0	0.50	12.8	
5310	Organic Carbon, Total	04/08/10	BLKTO040810A	mg/L	1	1.0	3.3	

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS40075

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825175

Matrix: WATER

Client: BBLKAL

Date Received: 04/07/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/09/10	BLKDS040910A	mg/L	1	5.0	601	
2540	Total Suspended Solids	04/09/10	BLKTS040910A	mg/L	0	0.50	0.50	U
5310	Organic Carbon, Total	04/09/10	BLKTO040910A	mg/L	2	2.0	22.6	

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS40076

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825368

Matrix: WATER

Client: BBLKAL

Date Received: 04/08/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/09/10	BLKDS040910A	mg/L	1	5.0	544	
2540	Total Suspended Solids	04/09/10	BLKTS040910A	mg/L	0	0.50	15.0	
5310	Organic Carbon, Total	04/09/10	BLKTO040910A	mg/L	1	1.0	3.3	

WET CHEMISTRY

Sample Report Summary

Client Sample No. _____

TS40077

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825369

Matrix: WATER

Client: BBLKAL

Date Received: 04/08/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/09/10	BLKDS040910A	mg/L	1	5.0	1620	
2540	Total Suspended Solids	04/09/10	BLKTS040910A	mg/L	0	0.50	15.5	
5310	Organic Carbon, Total	04/09/10	BLKTO040910A	mg/L	1	1.0	7.5	

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS40078

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825370

Matrix: WATER

Client: BBLKAL

Date Received: 04/08/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/09/10	BLKDS040910A	mg/L	1	5.0	836	
2540	Total Suspended Solids	04/09/10	BLKTS040910A	mg/L	0	0.50	12.1	
5310	Organic Carbon, Total	04/09/10	BLKTO040910A	mg/L	1	1.0	4.9	

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS40079

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825371

Matrix: WATER

Client: BBLKAL

Date Received: 04/08/10

% Solids:

[illegible]

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS40081

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825624

Matrix: WATER

Client: BBLKAL

Date Received: 04/09/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/14/10	BLKDS041410A	mg/L	1	5.0	803	
2540	Total Suspended Solids	04/13/10	BLKTS041310B	mg/L	0	0.50	17.3	
5310	Organic Carbon, Total	04/12/10	BLKTO041210A	mg/L	1	1.0	5.2	

WET CHEMISTRY

Sample Report Summary

Client Sample No. _____

TS40082

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825625

Matrix: WATER

Client: BBLKAL

Date Received: 04/09/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/14/10	BLKDS041410A	mg/L	1	5.0	807	
2540	Total Suspended Solids	04/13/10	BLKTS041310B	mg/L	0	0.50	19.3	
5310	Organic Carbon, Total	04/12/10	BLKTO041210A	mg/L	1	1.0	4.8	

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS40083

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825626

Matrix: WATER

Client: BBLKAL

Date Received: 04/09/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/14/10	BLKDS041410A	mg/L	1	5.0	761	
2540	Total Suspended Solids	04/13/10	BLKTS041310B	mg/L	0	0.50	21.1	
5310	Organic Carbon, Total	04/12/10	BLKTO041210A	mg/L	1	1.0	5.1	

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS40084

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825627

Matrix: WATER

Client: BBLKAL

Date Received: 04/09/10

% Solids:

[illegible]

WET CHEMISTRY

Sample Report Summary

Client Sample No. _____

TS40085

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825628

Matrix: WATER

Client: BBLKAL

Date Received: 04/09/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/14/10	BLKDS041410A	mg/L	1	5.0	643	
2540	Total Suspended Solids	04/13/10	BLKTS041310B	mg/L	0	0.50	17.9	
5310	Organic Carbon, Total	04/12/10	BLKTO041210A	mg/L	1	1.0	4.5	

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS40080

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825629

Matrix: WATER

Client: BBLKAL

Date Received: 04/09/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/14/10	BLKDS041410A	mg/L	1	5.0	649	
2540	Total Suspended Solids	04/13/10	BLKTS041310B	mg/L	0	0.50	9.5	
5310	Organic Carbon, Total	04/12/10	BLKTO041210A	mg/L	1	1.0	2.3	

WET CHEMISTRY

Sample Report Summary

Client Sample No. _____

TS31014

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825882

Matrix: WATER

Client: BBLKAL

Date Received: 04/10/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/14/10	BLKDS041410A	mg/L	1	5.0	397	
2540	Total Suspended Solids	04/13/10	BLKTS041310B	mg/L	0	0.50	23.9	
5310	Organic Carbon, Total	04/12/10	BLKTO041210A	mg/L	1	1.0	6.3	

WET CHEMISTRY

Sample Report Summary

Client Sample No.

TS40087

Lab Name: TestAmerica Burlington

Contract: 64539.0.005

SDG No.: KAL544

Lab Code: TALVT

Case No.: KZ00

Lab Sample ID: 825883

Matrix: WATER

Client: BBLKAL

Date Received: 04/10/10

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
2540	Total Dissolved Solids	04/21/10	BLKDS042110A	mg/L	2	10.0	2470	
2540	Total Suspended Solids	04/13/10	BLKTS041310B	mg/L	0	0.50	44.2	
5310	Organic Carbon, Total	04/12/10	BLKTO041210A	mg/L	1	1.0	11.0	

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS31012

Lab Sample ID: 500-24968-1

Client Matrix: Water

Date Sampled: 04/05/2010 1430

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	56		mg/L	0.30	2.0	10	300.0
	Analysis Batch: 500-84119 Date Analyzed: 04/16/2010 2118						
Sulfate	35		mg/L	0.53	2.0	10	300.0
	Analysis Batch: 500-84119 Date Analyzed: 04/16/2010 2118						
Alkalinity	230		mg/L	1.3	5.0	1.0	310.1
	Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1248						

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS31013

Lab Sample ID: 500-24968-2

Client Matrix: Water

Date Sampled: 04/05/2010 0000

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	58		mg/L	0.30	2.0	10	300.0
Analysis Batch: 500-84119 Date Analyzed: 04/16/2010 2132							
Sulfate	36		mg/L	0.53	2.0	10	300.0
Analysis Batch: 500-84119 Date Analyzed: 04/16/2010 2132							
Alkalinity	240		mg/L	1.3	5.0	1.0	310.1
Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1311							

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: ~~7931014~~ *JWM* TS40068

Lab Sample ID: 500-24968-3

Date Sampled: 04/05/2010 1140

Client Matrix: Water

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	39		mg/L	0.30	2.0	10	300.0
	Analysis Batch: 500-84119 Date Analyzed: 04/16/2010 2147						
Sulfate	110		mg/L	2.6	10	50	300.0
	Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1323						
Alkalinity	260		mg/L	1.3	5.0	1.0	310.1
	Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1319						

JWM 5/7/10

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40071

Lab Sample ID: 500-24968-4

Date Sampled: 04/06/2010 0920

Client Matrix: Water

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	75		mg/L	0.30	2.0	10	300.0
Analysis Batch: 500-84119 Date Analyzed: 04/16/2010 2230							
Sulfate	220		mg/L	2.6	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1406							
Alkalinity	450		mg/L	1.3	5.0	1.0	310.1
Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1334							

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40073

Lab Sample ID: 500-24968-5

Client Matrix: Water

Date Sampled: 04/06/2010 1140

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	50		mg/L	0.30	2.0	10	300.0
	Analysis Batch: 500-84119 Date Analyzed: 04/16/2010 2244						
Sulfate	330		mg/L	2.6	10	50	300.0
	Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1421						
Alkalinity	230		mg/L	1.3	5.0	1.0	310.1
	Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1342						

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40074

Lab Sample ID: 500-24968-6

Client Matrix: Water

Date Sampled: 04/06/2010 0000

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	50		mg/L	0.30	2.0	10	300.0
	Analysis Batch: 500-84119 Date Analyzed: 04/16/2010 2258						
Sulfate	340		mg/L	2.6	10	50	300.0
	Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1435						
Alkalinity	220		mg/L	1.3	5.0	1.0	310.1
	Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1350						

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40072

Lab Sample ID: 500-24968-7

Date Sampled: 04/06/2010 0930

Client Matrix: Water

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	60		mg/L	0.30	2.0	10	300.0
	Analysis Batch: 500-84119 Date Analyzed: 04/16/2010 2313						
Sulfate	79		mg/L	0.53	2.0	10	300.0
	Analysis Batch: 500-84119 Date Analyzed: 04/16/2010 2313						
Alkalinity	270		mg/L	1.3	5.0	1.0	310.1
	Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1357						

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40075

Lab Sample ID: 500-24968-8

Date Sampled: 04/06/2010 1155

Client Matrix: Water

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	12		mg/L	0.30	2.0	10	300.0
Analysis Batch: 500-84119 Date Analyzed: 04/16/2010 2327							
Sulfate	110		mg/L	2.6	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1449							
Alkalinity	360		mg/L	1.3	5.0	1.0	310.1
Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1405							

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40076

Lab Sample ID: 500-24968-9

Client Matrix: Water

Date Sampled: 04/07/2010 0830

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	110	B	mg/L	1.5	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1504							
Sulfate	46		mg/L	0.53	2.0	10	300.0
Analysis Batch: 500-84119 Date Analyzed: 04/17/2010 0010							
Alkalinity	330		mg/L	1.3	5.0	1.0	310.1
Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1414							

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40077

Lab Sample ID: 500-24968-10

Date Sampled: 04/07/2010 0925

Client Matrix: Water

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	68		mg/L	0.30	2.0	10	300.0
	Analysis Batch: 500-84119 Date Analyzed: 04/17/2010 0024						
Sulfate	770		mg/L	5.3	20	100	300.0
	Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1547						
Alkalinity	390		mg/L	1.3	5.0	1.0	310.1
	Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1422						

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40078

Lab Sample ID: 500-24968-11

Date Sampled: 04/07/2010 1045

Client Matrix: Water

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	110	B	mg/L	1.5	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1601							
Sulfate	220		mg/L	2.6	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1601							
Alkalinity	350		mg/L	1.3	5.0	1.0	310.1
Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1445							

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40079

Lab Sample ID: 500-24968-12

Date Sampled: 04/07/2010 1240

Client Matrix: Water

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	83	B	mg/L	1.5	10	50	300.0
	Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1615						
Sulfate	38		mg/L	2.6	10	50	300.0
	Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1615						
Alkalinity	260		mg/L	1.3	5.0	1.0	310.1
	Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1453						

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40081

Lab Sample ID: 500-24968-13

Client Matrix: Water

Date Sampled: 04/08/2010 1000

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	110	B	mg/L	1.5	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1630							
Sulfate	140		mg/L	2.6	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1630							
Alkalinity	350		mg/L	1.3	5.0	1.0	310.1
Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1501							

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40082

Lab Sample ID: 500-24968-14

Date Sampled: 04/08/2010 1150

Client Matrix: Water

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	120	B	mg/L	1.5	10	50	300.0
	Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1644						
Sulfate	150		mg/L	2.6	10	50	300.0
	Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1644						
Alkalinity	330		mg/L	1.3	5.0	1.0	310.1
	Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1508						

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40083

Lab Sample ID: 500-24968-15

Client Matrix: Water

Date Sampled: 04/08/2010 1145

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	120	B J	mg/L	1.5	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1658							
Sulfate	110	J	mg/L	2.6	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1658							
Alkalinity	350		mg/L	1.3	5.0	1.0	310.1
Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1531							

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40084

Lab Sample ID: 500-24968-16

Date Sampled: 04/08/2010 0000

Client Matrix: Water

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	29	85	mg/L	1.5	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1713							
Sulfate	21	5	mg/L	2.6	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1713							
Alkalinity	340		mg/L	1.3	5.0	1.0	310.1
Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1539							

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40085

Lab Sample ID: 500-24968-17

Client Matrix: Water

Date Sampled: 04/08/2010 1410

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	110	B	mg/L	1.5	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1727							
Sulfate	87		mg/L	2.6	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1727							
Alkalinity	280		mg/L	1.3	5.0	1.0	310.1
Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1546							

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40080

Lab Sample ID: 500-24968-18

Client Matrix: Water

Date Sampled: 04/08/2010 0915

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	130	B	mg/L	1.5	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1741							
Sulfate	68		mg/L	2.6	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1741							
Alkalinity	290		mg/L	1.3	5.0	1.0	310.1
Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1553							

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: ~~TS40086~~ ^{juu} TS31014

Lab Sample ID: 500-24968-19

Client Matrix: Water

Date Sampled: 04/09/2010 0915

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	47	B	mg/L	1.5	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1756							
Sulfate	30		mg/L	2.6	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1756							
Alkalinity	230		mg/L	1.3	5.0	1.0	310.1
Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1616							

juu 5/7/10

Analytical Data

Client: TestAmerica Laboratories, Inc.

Job Number: 500-24968-1

General Chemistry

Client Sample ID: TS40087

Lab Sample ID: 500-24968-20

Client Matrix: Water

Date Sampled: 04/09/2010 0940

Date Received: 04/13/2010 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Chloride	34	B	mg/L	1.5	10	50	300.0
Analysis Batch: 500-84298 Date Analyzed: 04/20/2010 1907							
Sulfate	1200		mg/L	26	100	500	300.0
Analysis Batch: 500-84419 Date Analyzed: 04/21/2010 0901							
Alkalinity	350		mg/L	1.3	5.0	1.0	310.1
Analysis Batch: 500-84223 Date Analyzed: 04/19/2010 1631							



ID#: 15016

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Lab Work Order #

Contact & Company Name: Eric Hritsuk		Telephone: 312-332-4937 x24		
Address: 30 W Monroe St		Fax: 312 332 41434		
City Chicago IL 60603		E-mail Address: Eric.Hritsuk@Aireds-us.com		
Project Name/Location (City, State): Plainville Gw Sampling		Project #: B0064539.000.00500		
Sampler's Printed Name: Michael Mathiah		Sampler's Signature: <i>[Signature]</i>		
Sample ID	Collection Date	Time	Type (✓)	Matrix
TS 40069	4-5-10	1430	✓	W
TS 410070	4-5-10	-	✓	W
TS 40068	4-5-10	1140	✓	W
TS 40068 MS	4-5-10	1140	✓	W
TS 40068 MSD	4-5-10	1140	✓	W
Special Instructions/Comments:				
Special QA/QC Instructions (✓):				
Laboratory Information and Receipt				
Lab Name: TAL Burlington	Cooler Custody Seal (✓) <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact			
Shipping Tracking #: Skud 6-2				
Sample Receipt: Condition/Cooler Temp: _____				
Specify Turnaround Requirements: Rel ex				
Relinquished By Printed Name: Michael Mathiah Signature: <i>[Signature]</i> Firm: ARCADIS Date/Time: 4-5-10 1700				
Received By Printed Name: _____ Signature: _____ Firm/Courier: _____ Date/Time: _____				
Relinquished By Printed Name: _____ Signature: _____ Firm/Courier: _____ Date/Time: _____				
Laboratory Received By Printed Name: Wade Matot Signature: <i>[Signature]</i> Firm: TA Date/Time: 04/06/10 1000				

Contact & Company Name: Erie Hritsuk						Telephone: 312-332-4937					
Address: 30 W Monroe St						Fax:					
City Chicago IL 60603						E-mail Address: Erie.Hritsuk@Awards.com					
Project Name/Location/City, State: Plumwell Cw Sample						Project #: 00064539.0000.00500					
Sampler's Printed Name: Michael Muthish						Signature: <i>[Signature]</i>					
Sample ID						Collection Date		Time		Type (✓)	Matrix
						Date		Comp		Grab	
TS 40071						4-6-10		0920		X	W
TS 40073						4-6-10		1140		X	W
TS 40074						4-6-10		-		X	W
TS 40072						4-6-10		0930		X	W
TS 40075						4-6-10		1155		X	W
Special Instructions/Comments:											
<input type="checkbox"/> Special QA/QC Instructions (✓):											
Laboratory Information and Receipt						Relinquished By			Received By		
Lab Name: Test America						Printed Name: Michael Mahini			Printed Name:		
<input checked="" type="checkbox"/> Cooler packed with ice (✓)						Intact			Signature:		
<input type="checkbox"/> Not Intact									Signature:		
Specify Turnaround Requirements: Standard						Sample Receipt:			Firm:		
Shipping Tracking #:						Condition/Cooler Temp: 0.60.7			Date/Time: 4-6-10		

Send Results to:		Contact & Company Name: <i>Eric Hritsuk</i>		Telephone: <i>312-332-41937</i>	
Address: <i>30 W Monroe ST</i>		City State Zip <i>Chicago IL 60603</i>		Fax: <i>312-332-41432</i>	
Project Name/Location (City, State): <i>Pharmwel bio Sampling</i>		E-mail Address: <i>Eric.Hritsuk@Arcadis-us.com</i>		Project #: <i>B0064539.0000.00500</i>	
Sampler's Printed Name: <i>Michael Mathiak</i>		Sampler's Signature: <i>Michael Mathiak</i>			

Sample ID	Collection		Type (✓)		Matrix
	Date	Time	Comp	Grab	
TS40076	4-7-10	0830		X	W
TS40077	4-7-10	0925		X	W
TS40078	4-7-10	1045		X	W
TS40079	4-7-10	1240		X	W

Preservative Filtered (✓)	E	A	E	E	E	C
# of Containers	2	1	1	1	1	1
Container Information	2	1	3	9	3	3

PARAMETER ANALYSIS & METHOD

Chloride	SS	TS	Total organic C	Total P
Sulfate			Carbon	
Alkalinity				
Total				
Meq/L				

Keys	
Preservation Key:	Container Information Key:
A. H ₂ SO ₄	1. 40 ml/Vial
B. HCL	2. 1 L Amber
C. HNO ₃	3. 250 ml Plastic
D. NaOH	4. 500 ml Plastic
E. None	5. Encore
F. Other: _____	6. 2 oz. Glass
G. Other: _____	7. 4 oz. Glass
H. Other: _____	8. 8 oz. Glass
	9. Other: _____
	10. Other: _____
Matrix Key:	
SO - Soil	SE - Sediment
W - Water	SL - Sludge
T - Tissue	A - Air
	Other: _____
	NL - NAP/OL
	SW - Sample Wipe

REMARKS[illegible][illegible]

Laboratory Information and Receipt		Received By		Relinquished By		Laboratory Received By	
Lab Name: <i>BGL Test America</i>	Cooler Custody Seal (✓) <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact	Printed Name: <i>Michael Mulhach</i>	Printed Name:	Printed Name:	Printed Name:	Printed Name: <i>Vu Phan</i>	
<input type="checkbox"/> Cooler packed with ice (✓)		Signature: <i>Michael Mulhach</i>	Signature:	Signature:	Signature:	Signature: <i>[Signature]</i>	
Specify Turnaround Requirements: <i>Standard</i>	Sample Receipt:	Firm: <i>ARCADIS</i>	Firm/Courier:	Firm/Courier:	Firm/Courier:	Firm: <i>TA-Bovington</i>	
Shipping Tracking #:	Condition/Cooler Temp: <i>0.2, 0.3</i>	Date/Time: <i>4-7-10 1700</i>	Date/Time:	Date/Time:	Date/Time:	Date/Time: <i>4/7/10 1830</i>	

Contact & Company Name: Eric Hritsuk		Telephone: 312-332-41937		
Address: 30 W Monroe ST		Fax:		
City: Chicago IL	State: IL	Zip: 60603	E-mail Address: Eric.Hritsuk@Arcadis-usa.com	
Project Name/Location (City, State): Plumtree II CW Sampling		Project #: B0064539.0000.00520		
Sampler's Printed Name: Michael Mathiak		Sampler's Signature: <i>[Signature]</i>		
Sample ID	Collection Date	Time	Type (✓) Comp Grab	Matrix
TS40081	4-8-10	1000	<input checked="" type="checkbox"/>	W
TS40082	4-8-10	1150	<input checked="" type="checkbox"/>	W
TS40083	4-8-10	1145	<input checked="" type="checkbox"/>	W
TS40084	4-8-10	—	<input checked="" type="checkbox"/>	W
TS40085	4-8-10	1440	<input checked="" type="checkbox"/>	W
TS40080	4-8-10	0915	<input checked="" type="checkbox"/>	W

Preservation Key: A. H ₂ SO ₄ B. HCl C. HNO ₃ D. NaOH E. None F. Other: _____ G. Other: _____ H. Other: _____ I. Other: _____		Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: _____ 10. Other: _____	
Matrix Key: SE - Sediment SL - Sludge A - Air SO - Soil W - Water T - Tissue NL - NAPL/Oil SW - Sample Wipe Other: _____			

REMARKS

PARAMETER ANALYSIS & METHOD	TS	TDS	Total Organic Carbon	Total Pbs	Total Metals
Chloride	X	X	X	X	X
Sulfate	X	X	X	X	X
Alkalinity	X	X	X	X	X
Metals	X	X	X	X	X

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By		Received By		Laboratory Received By	
Lab Name: TAI Test America	Cooler Custody Seal (✓) <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact	Printed Name: Michael Mathiak	Signature: <i>[Signature]</i>	Printed Name:	Signature:	Printed Name: Chris Kolb	Signature: <i>[Signature]</i>
Specify Turnaround Requirements: Star-4-1	Sample Receipt: 2.50.04	Printed Name:	Signature:	Printed Name:	Signature:	Printed Name:	Signature:
Shipping Tracking #:	Condition/Cooler Temp: _____	Firm:	Firm/Courier:	Firm:	Firm/Courier:	Firm:	Firm/Courier:
		Date/Time: 4-8-10 1700	Date/Time:	Date/Time:	Date/Time:	Date/Time: 4/9/10 1015	Date/Time:

Contact & Company Name: Eric Hristov Address: 30 W Monroe St City: Chicago State Zip: 60603 E-mail Address: Eric.Hristov@Arcadis-us.com Telephone: 312-332-4937 Fax: 312-332-4434		Keys Preservation Key: A. H ₂ SO ₄ 1. 40 ml Vial B. HCl 2. 1L Amber C. HNO ₃ 3. 250 ml Plastic D. NaOH 4. 500 ml Plastic E. None 5. Encore F. Other: 6. 2 oz Glass G. Other: 7. 4 oz Glass H. Other: 8. 8 oz Glass I. Other: 9. Other: 10. Other:	
Matrix Key: SE - Sediment NL - NAPL/Oil SO - Soil SL - Sludge SW - Sample Wipe W - Water A - Air T - Tissue Other:		REMARKS	
PARAMETER ANALYSIS & METHOD			
Total PCBs Total Organic Carbon TDS TSS Alkalinity Total Hardness	Filtered (✓) # of Containers Container Information	E A E E E C	C 1 1 3 3
Sample ID TS40086 TS40086 M15 TS40086 M250 TS40087	Collection Date 4-9-10 0915 4-9-10 0915 4-9-10 0915 4-9-10 0910	Type (✓) Comp Grab	Matrix W W W W
Special Instructions/Comments: <input type="checkbox"/> Special QA/QC Instructions (✓):			
Laboratory Information and Receipt			
Lab Name: TAL Burlington Cooler Custody Seal (✓) <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact	Relinquished By Printed Name: Michael Mathlach Signature: [Signature] Firm: ARCADIS Date/Time: 4-9-10 1700	Received By Printed Name: [Blank] Signature: [Blank] Firm/Courier: [Blank] Date/Time: [Blank]	Laboratory Received By Printed Name: Chris Kolb Signature: [Signature] Firm: [Blank] Date/Time: 4/10/10 0950
Specify Turnaround Requirements: Standard - 1 Fed Ex	Sample Receipt: Condition/Cooler Temp: 14.4 ± 0.6	Distribution: WHITE - Laboratory returns with results YELLOW - Lab copy PINK - Retained by ARCADIS	